



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,679	09/16/2003	Barry O'Brien	10527-462001	4092

26161 7590 01/22/2008
FISH & RICHARDSON PC
P.O. BOX 1022
MINNEAPOLIS, MN 55440-1022

EXAMINER

NGUYEN, VI X

ART UNIT	PAPER NUMBER
----------	--------------

3734

MAIL DATE	DELIVERY MODE
-----------	---------------

01/22/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/664,679

Applicant(s)

O'BRIEN ET AL.

Examiner.

Victor X. Nguyen

Art Unit

3734

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 October 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-31 and 47-56 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-31 and 49-56 is/are rejected.
- 7) ☒ Claim(s) 47 and 48 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 10/31/2007.

- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. The request filed on 10/31/2007 for Continued Examination (RCE) under 37 CFR 1.114 based on parent Application No. 10/664,679 is acceptable and a RCE has been established. An action on the RCE follows.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5,11,12,15-21,24-28,31,49-50 and 55-56 rejected under 35 U.S.C. 103 (a) as being unpatentable over Buscemi et al. (5,769,883) in view of Yan (5,843,172).

Buscemi discloses a stent device having the limitations as recited in the above listed claims, including: a tubular member which includes a porous structure (fig. 6, lines 27-30), where the porous structure defined by a plurality of hollow post shaped elements at 118, where the hollow post shaped elements separated by a void region at 105 and each hollow post shaped element defines an internal volume at 119 which adapted to contain a therapeutic agent (see col. 11, lines 34-37).

Buscemi is silent regarding the porous structure comprising of titanium or tantalum or an alloy thereof.

Yan discloses the porous structure comprising of titanium or tantalum or an alloy thereof (see col. 4, lines 14-47)

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Buscemi by constructing the porous structure comprising of titanium or tantalum or an alloy thereof as taught by Yamauchi for improving the strength and elasticity of making a stent with porosity of the metal, because one of ordinary skill in the art would have been able to carry out such a substitution, and the results were reasonably predictable.

As to claims 2-5,11-12,15-21,24-28,31,49-50,55-56, Yan discloses (see col. 2 lines 46-66 and col.4, lines14-47 and col. 5, lines 1-54) the tubular member comprises a therapeutic agent contained in the internal volumes, the void (see figs. 6, 8) which is selected from an antithrombogenic or antibiotic drug, where the porous structure includes a polymer which is coating over the structure, and where the porous structure is inherently including a colorant which enable the device to be visualized during implantation (see col.7, lines 21-50), and where the hollow post shaped element generally tubular which comprises a closed end as disclosed in fig. 8 of Buscemi.

Regarding claims 6-10,13-14,22-23 and 29-30, Buscemi in view of Yan discloses the device substantially as claimed except for the tubular member includes a layer that has a thickness between 50nm and about 500nm and the post shaped elements have pore diameters of about 20nm-200nm or a post height of about 100nm-200nm. It would have been obvious to modify the tubular member includes a layer that has a thickness between 50nm and about 500

nm and the post shaped elements have pore diameters of about 20nm-200nm or the post height of about 100nm-200nm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re. Aller, 220F, 2d 454, 105 USPQ 233. Furthermore, Buscemi in view of Yan is silent regarding the different metal is about 90% or more of the thickness of the tubular member or the device has a color corresponding to light having a wavelength between 370 nm –750 nm. It would have been obvious to modify the different metal is about 90% or more of the thickness of the tubular member or the device has a color corresponding to light having a wavelength between 370 nm –750 nm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re. Aller, 220F, 2d 454, 105 USPQ 233.

Regarding claims 51-54 , Buscemi in view of Yan discloses the device substantially as claimed except for the post shaped porous structure element has density of 10- 300 post-shaped elements per square micron. It would have been obvious to modify the post shaped porous structure element has density of 10- 300 post-shaped elements per square micron, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re. Aller, 220F, 2d 454, 105 USPQ 233. Furthermore, Buscemi in view of Yan is silent regarding the porous structure acts as a grating that preferentially reflects light having a wavelength between 370 nm and 750 nm. It would have been obvious to modify the porous structure acts as a grating that preferentially reflects light having a wavelength between 370 nm and 750nm, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the

optimum or workable ranges involves only routine skill in the art. In re. Aller, 220F, 2d 454, 105 USPQ 233.

Allowable Subject Matter

3. Claims 47-48 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

As allowable subject matter has been indicated, applicant's reply must either comply with all formal requirements or specifically traverse each requirement not complied with. See 37 CFR 1.111(b) and MPEP § 707.07(a).

Response to Arguments

4. Applicant's arguments filed 10/31/2007 have been considered but are moot in view of new ground(s) of rejections. Applicant is asked to please refer to the modified prior art rejections above where examiner addresses applicant's concerns regarding prior art rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Victor X. Nguyen whose telephone number is (571) 272-4699. The examiner can normally be reached on M-F (8-4.30 P.M).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Hayes can be reached on (571) 272-4697. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number:
10/664,679
Art Unit: 3734

Page 6

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Victor X Nguyen
Examiner
Art Unit 3734



VN *VP*
1/11/2008



MICHAEL J. HAYES
SUPERVISORY PATENT EXAMINER